

## Notice of Allowability

Application No.

09/471,153

Examiner

Lan Nguyen

Applicant(s)

JONES ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephone interviews with George Ayvazov from 12/28/05 to 1/12/06.
2. ☒ The allowed claim(s) is/are 1,4-6 and 8.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

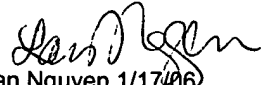
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Lan Nguyen 1/17/06  
Primary Examiner

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George Ayvazov on 1/12/06.

The application has been amended as follows:

Claims 1 and 8 are currently amended. A clean version of each claim is presented below.

**Claim 1.** A vehicle axle beam and drum brake assembly, comprising:

a pneumatic brake actuator cylinder provided with an actuator rod extending therefrom, said pneumatic brake actuator cylinder being solely supported by a brake spider;

a brake actuating shaft having a first end and a second end;

a brake actuating lever interconnecting said actuator rod and said first end of said brake actuating shaft;

an S-cam secured to said second end of said brake actuating shaft;

said brake spider non-removably secured to said axle beam to support a brake assembly, said brake spider including a pivoting end support plate and an actuator

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support plate provided with an opening for receiving said brake actuating shaft therethrough;

a mounting sleeve having a first end and a second end, said first end of said mounting sleeve is secured to said pneumatic brake actuator cylinder and said second end of said mounting sleeve is secured to said actuator support plate of said brake spider, said brake actuating shaft rotationally supported and positioned within said mounting sleeve;

a pair of brake shoes pivotally supported on said pivoting end support plate of said brake spider, said brake shoes adapted to frictionally engage a bearing surface of a brake drum; and

a cam follower secured on each of said shoes and adapted to interfit with an outer surface of said S-cam,

wherein when said actuator rod is extended, said brake actuating shaft and said S-cam rotate about the longitudinal axis such that said brake shoes are brought into frictional engagement with said bearing surface.

**Claim 8.** A vehicle axle beam and drum brake assembly, comprising:

a pneumatic brake actuator cylinder provided with an actuator rod extending therefrom, said pneumatic brake actuator cylinder being solely supported by a brake spider;

a brake actuating shaft having a first end and a second end;

a brake actuating lever interconnecting said actuator rod and said first end of said brake actuating shaft;

an S-cam secured to said second end of said brake actuating shaft;

said brake spider welded to said axle beam to support a brake assembly, said brake spider including a pivoting end support plate and an actuator support plate provided with an opening for receiving said brake actuating shaft therethrough, said actuator support plate being axially offset from said pivoting end support plate;

a mounting sleeve having a first end and a second end, said first end of said mounting sleeve is secured to said pneumatic brake actuator cylinder and said second end of said mounting sleeve is secured to said actuator support plate of said brake spider, said brake actuating shaft rotationally supported and positioned within said mounting sleeve;

a first mounting bracket attached to said first end of said mounting sleeve, said first mounting bracket is fastened to said pneumatic brake actuator cylinder;

a second mounting bracket attached to said second end of said mounting sleeve, said second mounting bracket is fastened to said actuator support plate of said brake spider;

a pair of brake shoes pivotally supported on said pivoting end support plate of said brake spider, said brake shoes adapted to frictionally engage a bearing surface of a brake drum; and

a cam follower secured on each of said shoes and adapted to interfit with an outer surface of said S-cam,

wherein when said actuator rod is extended, said brake actuating shaft and said S-cam rotate about the longitudinal axis such that said brake shoes are brought into frictional engagement with said bearing surface.

2. Please submit a set of formal drawings.
3. The following is an examiner's statement of reasons for allowance:

Claims 1 and 8 as amended overcome the prior art of record. A discussion of the following patents is included to provide the background of the amendments to claims 1 and 8 to further distinguish the instant invention from the prior art of record. Patent 3279569 to Kieser et al. shows a similar brake assembly, as in the present invention, in figure 1 wherein the spider 18 is welded to axle beam 12. However, the pneumatic brake actuator cylinder 16 is not solely supported by the spider 12 since bracket 47 is shown supporting the cylinder 16 in figure 3 of Keiser. Patent 5649612 to Walker et al. shows a similar brake assembly, as in the present invention, in figure 2 wherein the pneumatic brake actuator cylinder 28 is shown to be supported by the spider 12 via sleeve 46. However, Walker does not specifically state or show that the cylinder 28 is solely supported by the spider 12. Moreover, the spider 12 of Walker is bolted to the flange 14 of the axle beam 16 as shown in figure 1 wherein the spider 12 is shown with bolt holes (not numbered).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Nguyen  
Primary Examiner  
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 1/17/06